

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1 (Original): A method of determining the efficacy of a test compound given to a subject for the treatment of obesity, comprising:

- (a) assaying a plasma sample from the subject to determine a level of agouti related protein (AGRP) at a first time point;
- (b) administering the test compound to the subject; and
- (c) thereafter assaying a plasma sample from the subject to determine the level of AGRP at a second time point;

wherein the test compound is an appetite suppressant which does not stimulate the release of serotonin and wherein a decreased level of AGRP at the second time point relative to the first time point is indicative of the efficacy of the test compound in treating obesity.

Claim 2 (Currently amended): The method of ~~claim 1~~ claim 1, wherein the subject is a human.

Claim 3 (Original): The method of claim 1, wherein the subject is a rodent.

Claim 4 (Original): The method of claim 3, wherein the rodent is a rat.

Claim 5 (Original): The method of claim 1, wherein the level of AGRP is determined by radioimmunoassay.

Claim 6 (Original): The method of claim 1, wherein the level of AGRP is determined by ELISA.

Claim 7 (Original): The method of claim 1, wherein the level of AGRP is determined by radioligand binding assay.

Claim 8 (Original): The method of claim 1, wherein the level of AGRP is determined by liquid chromatography.

Claim 9 (Original): The method of claim 1, wherein the amount of time between the first time point and the second time point is at least four hours.

Claim 10 (Original): The method of claim 1, wherein the amount of time between the first time point and the second time point is from about two hours to about four days.

Claim 11 (Currently amended): A method for following the progress of a therapeutic regime designed to alleviate obesity to determine effectiveness of the regime, comprising:

(a) assaying a plasma sample from a subject to determine a level of agouti related protein (AGRP) at a first time point;

(b) assaying a second plasma sample from the subject to determine a level of AGRP at a second time point, wherein the therapeutic regime is followed by the subject between the first time point and the second time point; and

(c) comparing said level at said second time point to the level determined in (a) as a determination of effect of said therapeutic regime wherein a decrease in the level of AGRP is indicative of the effectiveness of the regime.

Claim 12 (Original): A method for determining the appropriate dosage of an appetite suppressant given to a subject for the treatment of obesity, comprising:

(a) assaying a plasma sample from the subject to determine a level of agouti related protein (AGRP) at a first time point;

(b) administering the appetite suppressant to the subject;

(c) thereafter assaying a plasma sample from the subject to determine the level of AGRP at a second time point, wherein the appetite suppressant does not stimulate the release of serotonin;

(d) determining whether the appetite suppressant was administered at the appropriate dosage, wherein a decreased level of AGRP at the second time point relative to the first time point is indicative of the efficacy of the appetite suppressant in treating obesity at the dosage administered; and

(e) adjusting dosage as needed.